

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1 1. – 9. (Cancelled)

1 10. (Previously Presented) A method for maintaining secure network connections, the
2 method comprising:

3 duplicating, at a third network element, a security association associated with a secure
4 network connection between a first network element and a second network element, wherein a
5 lookup of the security association associated with the secure network connection is not
6 dependent on any destination address; and

7 in response to detecting failure of the second network element, replacing the second
8 network element with the third network element in the secure network connection with the first
9 network element, wherein the secure network connection between the first network element and
10 the third network element is based on the duplicated security association.

1 11. (Previously Presented) The method according to claim 10 further comprising sending at
2 least one secure message from the third network element to the first network element to notify
3 the first network element that the secure network connection will be taken over by the third
4 network element.

1 12. (Currently Amended) A method for maintaining secure network connections, the method
2 comprising:

3 configuring a plurality of security gateways such that a lookup of security associations is
4 not dependent on any destination address;[[and]]

5 sharing a security association among the plurality of security gateways;

6 a first of the security gateways detecting failure of a second of the security gateways
7 involved in a secure connection with a network device, wherein the secure network connection is
8 associated with the security association; and

9 in response to detecting the failure, the first security gateway sending a message to the
10 network device that the first security gateway is taking over the secure network connection.

1 13. (Cancelled)

1 14. (Previously Presented) The first security server according to claim 22, wherein a lookup
2 of security associations is not dependent on any destination address.

1 15. – 16. (Cancelled)

1 17. (Previously Presented) The first security server according to claim 22, wherein
2 communications between the mobile client and the first security server are based on a security
3 architecture for the internet protocol (IPsec).

1 18. – 19. (Cancelled)

1 20. (Previously Presented) The method of claim 10, further comprising:
2 during life of the secure network connection between the first and second network
3 elements, the third network element receiving information relating to the security association of
4 the secure network connection from the second network element.

1 21. (Previously Presented) The method of claim 20, wherein the first network element is a
2 mobile client, and the second and third network elements are security servers.

1 22. (Previously Presented) A first security server comprising:
2 a transceiver to receive information relating to at least one security association of a secure
3 network connection between a mobile client and a second security server; and
4 a processor module to:
5 monitor operation of the second security server;
6 in response to detecting failure of the second security server, send a message to
7 the mobile client that the first security server is taking over the secure network connection; and
8 communicate with the mobile client using the at least one security association
9 over the secure network connection between the first security server and the mobile client.

1 23. (Previously Presented) The method of claim 10, wherein the first network element is a
2 mobile client, and the second and third network elements are security servers.

1 24. (Previously Presented) The first security server of claim 22, wherein information relating
2 to the at least one security association is duplicated at the first and second security servers.

1 25. (Previously Presented) The method of claim 12, wherein sharing the security association
2 comprises sharing an IPsec security association among the plurality of security gateways.

1 26. (New) The method of claim 10, wherein replacing the second network element with the
2 third network element in the secure network connection comprises the third network element
3 sending a notification to the first network element that the third network element is taking over
4 the secure network connection.

1 27. (New) The method of claim 10, further comprising:
2 after replacing the second network element within the third network element in the secure
3 network connection, the third network element communicating with the first network element
4 without the third network element re-establishing another connection with the first network
5 element.

1 28. (New) The first security server of claim 22, wherein the processor module is configured
2 to communicate with the mobile client after taking over the secure network connection without
3 re-establishing a new connection.